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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,232	11/30/2001	Bruce R. Scharf	005557.P005	9239

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EXAMINER	
PHAN, JAMES	
ART UNIT	PAPER NUMBER

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/000,232	SCHARF ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	James Phan	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,5,10,12,13,15,20,22,23,25 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,6-9,11,14,16-19,21,24,26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

J.P.  
11/11/06

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The rejections of claims 1, 4, 6-9, 11, 14, 16-19, 21, 24, 26-29 under 35 U.S.C. 103(a) made in the office action mailed 4/6/06 are repeated.

***Response to Arguments***

Applicant's arguments filed 7/10/06 have been fully considered but they are not persuasive. Applicant has traversed the above rejections by arguing that Floyd teaches away from a combination with Mertz. To support his argument applicant states "First, Floyd discloses that both the mirror 140 and the torsional mirror 150 should be flat and smooth (col. 2, lines 65-68). Floyd teaches that both mirrors should be built in the SCS layer precisely because the material properties of SCS allow the formation of the required flat and smooth mirrors. Second, Floyd's choice of laser 105 reinforces its requirement for very flat and smooth mirrors. Floyd discloses that the laser 105 should be a vertical-cavity surface-emitting laser (VCSEL) because of its very small divergence angle (see col. 3, lines 10-25). The reason for choosing a laser such as a VCSEL with a very small divergence angle is to avoid focusing or collimating the beam. Thus, Floyd teaches against modifying any of its mirrors to collimate or focus a beam, and thus teaches against combination with Mertz or any other reference that discloses a pattern on the surface of a reflector." Thus, the

combination does not meet claim 1 because they do not meet every element of the prima-facie case. (Applicant's Remarks, page 7, second paragraph).

In response the examiner states (1) that **each** of the micro-reflectors of the micro Fresnel mirror taught in Mertz are flat and smooth. As show in Fig. 5 each of the micro-reflectors having upper surfaces that are flat and smooth; and each of the micro-reflectors having lower surfaces that are flat and smooth; (2) that Floyd does not teach the use of a laser such as a VCSEL with a very small divergence angle to avoid focusing or collimating the beam; instead, Floyd discloses that "Integration of the scanner and light source eliminates the need for external, manual positioning of light source and scanning mirrors." (column 2, lines 1-3); and (3) that a divergent light, regardless of the divergent angle, emitted from a light source would produce a non-uniform intensity light spot on a surface to be scanned; thus, an external optical element is needed for condensing or collimating or focusing the emitted light beam so as to obtain a quality scanned image. Thus, Floyd does not teaches against modifying any of its mirrors to collimate or focus a beam, thus Floyd does not teach away from the combination with Mertz; and thus, the above rejection of claim 1 is proper for the reasons stated in the office action mailed 4/6/06.

Applicant further argues that claims 4, 6-9, 11, 14, 16-19, 21, 24-29 are allowable for the similar reasons discussed in the traversal of the rejection of claim 1 above. In response the examiner states that for the similar reasons stated in the response to applicant's arguments with respect to the rejection of claim 1 above, claims 4, 6-9, 11, 14, 16-19, 21, 24-29 are unpatentable.

***Conclusion***


**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Phan whose telephone number is (571) 272-2317. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
James Phan  
Primary Examiner  
Art Unit 2872

JP  
October 2006